

ARCHÆOLOGY IN EGYPT AND GREECE.

NO great discovery has marked the progress of archæological excavation in the Near East during the past season. The fierce heat of summer has now, at the time of writing (August), stopped all excavation by us northerners in the lands of the eastern Mediterranean, and probably only the Cretan archæologists at Tyllissos (and possibly the Italians, also in Crete) are still in the field. The work of winter and spring is over, and we may now sum up the more important results of it.

In the Nile-basin the most sensational find has been that of Profs. Garstang and Sayce, working for the Sudan Excavations Committee of the University of Liverpool, at Meroë, in the Sudan, the ancient seat of the kingdom of the Kandake queens. The splendid bronze head (Fig. 1) of an imperial Roman of the first century A.D. (no doubt Augustus himself), which was on view in June in the rooms of the Society of Antiquaries at Burlington House, and has now been acquired by the British Museum, was alone sufficient to "make the fortune" of any excavator; while the nuggets and cakes of gold which a lucky chance revealed to Prof. Garstang's spade are no doubt a very unusual sensation in archæology. To the Sudani, and not less to the Egyptian and the Nilote Greek, it must have seemed that one antika-hunter, at any rate, had at last obtained what all must really be seeking—gold.

Gold, far more than iron nowadays, "doth of itself attract a man"; and for its gold alone the Meroë excavation would be remarkable to the vulgar, while the head of Augustus renders it remarkable to the *cognoscenti*. But we cannot dignify either the finding of a heap of ancient dross, though intrinsically valuable and useful on account of its value, or that of a fine Roman bronze head, as a great discovery. The great discovery was made last year, when the Meroë of the Kandakes was found, and the temple of Amen mentioned by Herodotus was identified. The smaller finds this year are less interesting than those of last year. There is more of the remarkable African-looking, hand-made pottery which to our eyes unmistakably stamps the Meroïtes as pure negroes of central Africa, Nilotes perhaps, but certainly negroes; as, indeed, we see in their rude pseudo-Egyptian representations of themselves and of the Egyptian gods whose worship they caricatured.

Of the history of the Roman head and how it got to Meroë, we can only conjecture that in some raid northwards into Upper Egypt the head of an imperial statue of heroic size, set up possibly at Syene, was struck off and carried by the barbarians back to Meroë. Though in the reign of Augustus the Roman general Petronius took Napata (Gebel Barkal) from one of the Kandakes (in punishment for just such an incursion as has been postulated), the place was not retained, and there is no likely place for a big public statue of an emperor anywhere south of Syene: it is not at all probable that so fine a figure as this must have been would be set up at the southern frontier station of Primis (Ibrim). From Syene then we must suppose that the head originally came, and it is most like a young Augustus, of all the imperial family: perhaps one may almost call it an Octavian. Germanicus it certainly is not, nor is a statue of Germanicus in Egypt in any way probable, or even possible, in spite of the honour with which he was received: he was there illegally, in violation of the law of Augustus which forbade those of senatorial rank to visit that country. The head has now been placed in the British Museum through the generosity

of the Sudan Excavations Committee, in consideration of a gift of a thousand guineas towards the committee's further excavations by the National Art Collections Fund. The photograph here shown was kindly lent by Prof. Bosanquet.

As for the gold, one might well wish that it could be coined into sovereigns, each with the word Meroë stamped upon it in the manner of the Vigo money, coined of the silver captured out of Spanish galleons at Vigo, of Queen Anne. But it is to be feared that the "Meroë" sovereigns would as soon pass out of circulation as did those of President Kruger!

Generally speaking, the Liverpool excavations have been of great interest as showing us more of the life of this curious Egyptianised negro kingdom of Meroë, whose Queen Kandake sent the eunuch to Jerusalem who was converted to Christianity and baptised by St. Philip on the way to Gaza (Acts viii. 27). There is no proof that he perpetuated his new religion at Meroë, though long afterwards the Ethio-

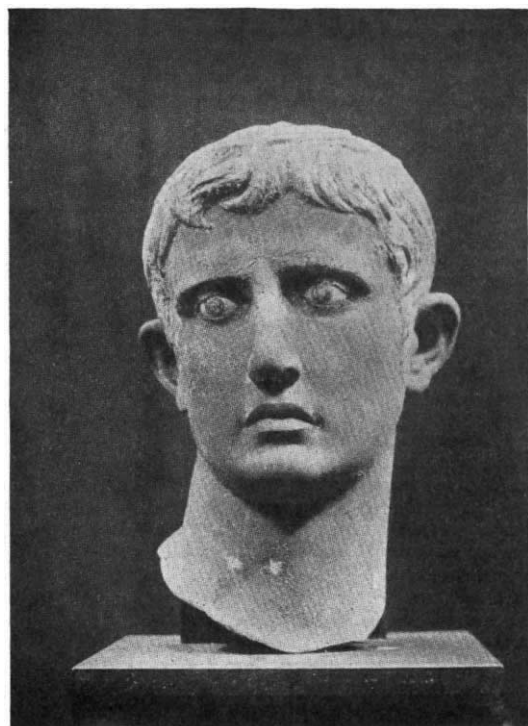


FIG. 1.—The Meroë Head of Augustus.

pians were strong Christians and handed their faith on to the non-negro Abyssinians, who (absurdly) like to call themselves "Ethiopians" to-day.

Passing northward to the modern border of Egypt and the Sudan, the scene of many an Ethiopian foray in old Roman days and many an Egyptian razzia in days then ancient, we find that at Farrās, north of Wadi Halfa and just on Sudanese territory, Mr. F. Ll. Griffith, reader of Egyptology in the University of Oxford, has, assisted by Mr. Blackman, excavated a large number of tombs of late period, ranging from Ptolemaic to Christian days. Very interesting pottery has been found, linking up that of Meroë with that of Nubia exemplified by Mr. Randall-MacIver's finds at Areika (see NATURE, April 28, 1910), but at the same time presenting constant points of difference and originality. Additions have also been made to our store of inscriptions in the

"Meroitic" demotic script, of which Mr. Griffith is the first to begin the decipherment.

One cannot describe in detail all the various excavations, some regular, others ephemeral, that are set on foot every year in Egypt. The season has not been remarkable for discoveries. The Egypt Exploration Fund, premier and pioneer of modern scientific excavation-societies in Egypt, has dug with success at Atfih in Middle Egypt (this work was carried out by Mr. de M. Johnson), and has steadily gone on with the thorough exploration of Abydos which it resumed two years ago. The Fund's expedition at Abydos was directed by Prof. Naville, assisted by Mr. T. E. Peet and Mr. James Dixon. The work of supplementing Prof. Petrie's former excavations of the royal tombs of the first dynasty at Umm el-Qa'ab by further investigations has been brought, at any rate temporarily, to a conclusion, the previously unexplored portion of the Mound having been thoroughly excavated. Last year interesting discoveries had been made, including a fragment of a crystal bowl with the name of an early king (well known from the former discoveries of Amélineau on the same site), which has been the subject of scientific discussion and is now in the British Museum.

The results of this year's work from the tombs explored in the necropolis of Abydos (not Umm el-Qa'ab) have been exhibited, not in England, but at Boston. The Egypt Exploration Fund is an Anglo-American society, and it is fitting that the yearly exhibition should occasionally, at least, be held in the United States.

Next year Prof. Naville proposes to proceed to the complete exploration of the "Osireion," an extraordinary subterranean (or apparently subterranean) sanctuary of Osiris, close to the great temple of Seti I. This Osireion has already been attacked by the Egyptian Research Account, several years ago, and the results of this work were published by Miss M. A. Murray. But various reasons did not allow of the heavy work of emptying this tunnel being concluded, and it now remains for the excavators of the Exploration Fund, directed by a veteran whose speciality has always been precisely this kind of work, to discover the hidden secrets of the Osireion. But for a big work of this kind money is necessary. Subscriptions for the Fund are urgently required, and the office of the secretary is 37 Great Russell Street, W.C. Among recent subscribers to this work may be mentioned, as an instance of Japanese interest in all branches of science, the University of Kyoto, which has already received from the Fund many interesting relics of ancient Egypt to be studied by the youth of new Japan.

The other British society at work in Egypt, the Egyptian Research Account, has, under the direction of Prof. Flinders Petrie, continued its work at Memphis and elsewhere. An interesting series of Græco-Roman portraits from Hawara, similar to those discovered by Prof. Petrie at the same place many years ago, has been exhibited at University College, Gower Street, this summer, together with sculptures from the Egyptian Labyrinth and from Memphis, and

prehistoric vases and flints from a site explored during the season's work.

Turning to Crete, we find a sterility of results this year comparable to that in Egypt. Sir Arthur Evans (whom we congratulate most heartily on his richly deserved knighthood) has not put spade to earth at Knossos this year, or continued the works of conservation which he carried out in the "Queen's Megaron" last year. Nor has Mr. Seager dug in the country round the Isthmus of Hierapetra, which he has earmarked as his own special hunting-ground. But he has located, and reserved for future excavation, possibly next year, an extraordinary village-site of the Geometric period, on a ledge, almost inaccessible to all but Cretans and Mr. Seager, high up on the vertical side of the great cleft in the mountains above the village of Monasteraki, near Kavousi (Fig. 2). This ledge, at first barely three feet wide, turns the corner of the cleft, and there, well within the gorge, broadens into a platform some ten feet across, on which people of the Geometrical period had found a hidden and secure



FIG. 2.—The great Cleft of Kavousi.

refuge from the attacks of the Ægean pirates of their degenerate and barbarous times. The cliff rises sheer above, and falls sheer below for hundreds of feet to the untrodden floor of the gorge. Another work reserved by Mr. Seager until next year is the continued exploration of the hill-village of Vrokastro, begun last year by Miss Edith Hall, which yielded interesting antiquities of the transition period from Geometric to classical times.

The Italian work of recent years has resulted in the addition of a pillared "agora" to the palace of Agia Triada (Fig. 3): the results of this year's explorations, which were not yet begun when the writer visited Phaistos and Agia Triada in May, have not yet come to hand.

An interesting feature of Cretan work is now the participation in it of the Cretans themselves, who are keenly interested in the antiquities and past history of their splendid but sorely tried and oppressed island. In Drs. Hatzidakis and Xanthoudidis, Crete possesses archæologists of whom England, France,

Germany, or any other country might be proud. Dr. Xanthoudidis has for several years past made important discoveries, and now Dr. Hatzidakis has discovered and is excavating an important Minoan palace at Tylissos, not far from Knossos, at the base of Ida. Great brazen bowls, the largest vase of obsidian (a single piece twelve inches high) yet discovered, and a remarkably bold and fine bronze statuette of a man in the Minoan saluting attitude of adoration, are only a few of the fine trophies that have come from Tylissos to the shelves of the really magnificent museum of Candia. The work at Tylissos continues under the direction of Dr. Hatzidakis.

The Museum of Candia may be described as the Mecca of students of the Greek Bronze age, though the Ashmolean at Oxford, thanks to the unremitting care of Sir Arthur Evans, is a very good second to

a fresco depicting a boar-hunt, in which figure two women (or, more probably, in the writer's view, noble youths) riding to the hunt in a chariot. A fine representation of a woman in splendid robes has also been found. Reproductions of this fresco, from the accomplished hand of M. Gilliéron, junr., will soon be given to the world.

Elsewhere in Greece, though interesting results have been obtained by the French at Delos, the most remarkable discovery has been made this year at Corfu, where the Greek Archæological Society has discovered an archaic temple, with sculptures resembling the metopes of Selinus in Sicily. In view of the fact that ancient Kerkyra was a colony of Corinth, and Selinus of the neighbouring Megara, this resemblance is interesting. At the time of the discovery the German Emperor was in residence at his Corfiote palace of the Achilleion, and, thanks to his active interest in it, the excavation is to be continued under the distinguished direction of the leader of German archæology in the Levant, Prof. Dörpfeld (see *NATURE*, vol. lxxxvii., p. 149).

I bring this account to an end with a mention of the explorations of Messrs. Wace and Thompson for the English Macedonian Exploration Fund in the Elassona district of Turkish Thessaly, which will no doubt add much to our knowledge of the remarkable Neolithic culture of northern Greece, which has upset so many preconceived notions of the early history of Greek civilisation. It may be noted, in this connection, that Mr. F. W. Hasluck has just discovered a Minoan "bee-hive" tomb at Kirk-kilisse in the vilayet of Adrianople. H. R. HALL.

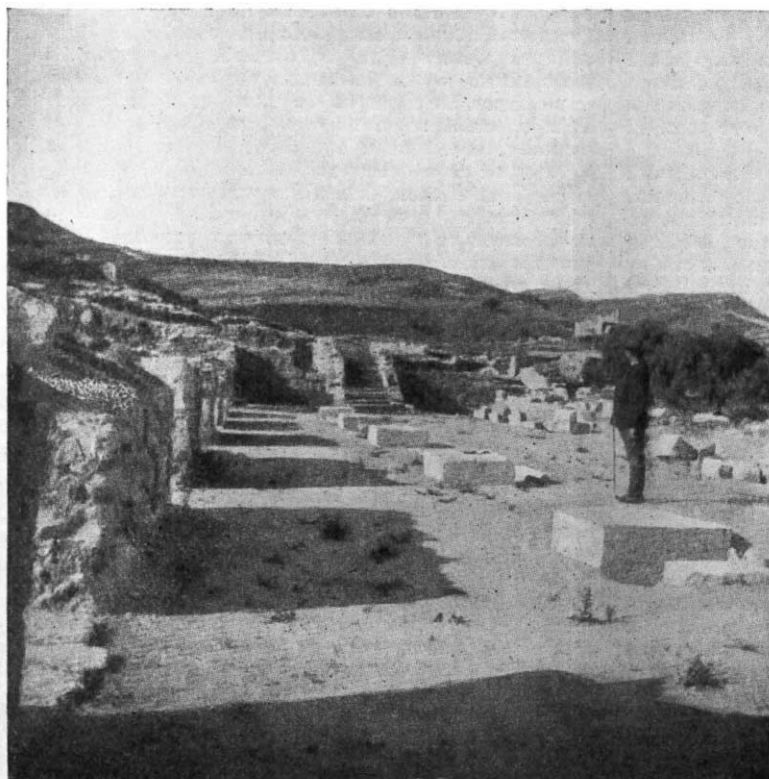


FIG. 3.—Agia Triada : the new Agora.

it, so far as Cretan antiquities are concerned, and the first vase room at the British Museum now contains a "Mycenæan" collection which, thanks chiefly to the results of past excavations of Minoan tombs in Cyprus, makes the British Museum by no means a bad third, while its Cretan collection also has now become quite important. The Museum of Athens proudly exhibits its trophies from "golden" Mycenæ and elsewhere in Greece, but of Cretan and Cypriote antiquities it has none.

The British School at Athens has again turned its attention to a Mycenæan site this year, having resumed its interrupted excavations at Phylakopi in the island of Melos. Interesting discoveries, especially of pottery, have been made. The German work at Tiryns last year produced most important results, especially remarkable being the remains of

may wonder in what these great advantages really consist. He will remember that the employment of tungsten in place of carbon for the filaments of incandescent lamps, and the consequent improvement in efficiency from 4 to $1\frac{1}{4}$ watts per candle-power, dates back to five years ago, and will point out that in the present form of this lamp a tungsten filament is still used, heated to the same temperature, and consequently having the same light efficiency. As to electric heating, he may even be still more sceptical, for, when at school or college, he may have learnt that the energy of an electric current flowing continuously through a resistance is transformed into heat, and that no invention can make the heat generated greater than is represented by the square of the current multiplied by the resistance of the wire. It will, therefore, not be out of place to pass in review

PROGRESS IN ELECTRIC LIGHTING, HEATING AND COOKING.

ELECTRICAL engineers are claiming—and are claiming with justice—that great advances from the industrial and commercial point of view have been made during the last year or two in electric lighting, heating and cooking; but the average man of science, who probably concerns himself more with general principles than with the detailed applications of physics,